#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007358 Address: 333 Burma Road **Date Inspected:** 03-Jun-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Wu Zhi Cheng **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

#### **OBG** Trial Assembly Area-

During random visual inspection of OBG segment 1AE to 1BE exterior Bottom Plate for complete joint penetration weld OBE1A-008. And after completion of back gouging and grinding in preparation for welding on the exterior surface of the weld, nine (9) transverse linear indications were observed. The 9 indications ranged in length from 3 mm to 15 mm. The transverse indications were shown to ZPMC and ABF QC Inspectors. Caltrans QA performed random Magnetic Particle inspection (MT) in the areas where the visual linear indications had been observed and these inspections confirmed the linear indications are rejectable. AWS D1.5 (02) Section 6.26.1.1 – "The weld shall have no cracks" ZPMC QC stated ZPMC would perform 100% MT of the exterior back gouge area. An incident was issued for the above mention defects.

Bay 3-

FCAW welding of weld joints 003 and 004 located on Longitudinal Diaphragm LD002-030 component FB009-040. ZPMC welder was identified as 070101. ZPMC QC is identified as Chen Xi. The welding appeared to be in conformance with welding procedure specification, WPS-B-T-2132-2.

Bay 5-

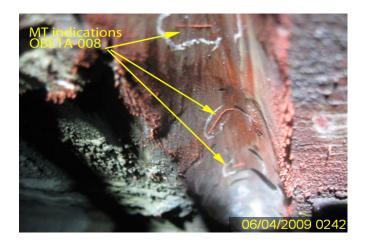
# WELDING INSPECTION REPORT

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SMAW welding of weld joints 008 and 009 located on 131 meter West Tower Double Diaphragm WSD1-DPSA4-11B/B. ZPMC welders was identified as 066268 and 037779. ZPMC QC is identified as Zhao Chen Sun. The welding appeared to be in conformance with welding procedure specification, WPS-B-T-3312-TC-P5.

FCAW welding of weld joint 024 located on Floor Beam, FB204-029. ZPMC welder was identified as 215185. ZPMC QC is identified as Li Yang. The welding appeared to be in conformance with welding procedure specification, WPS-B-T-2232-TC-U4b-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

As identified within the contents of this report.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150 0042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer